8-2003

Staying longer at school and absenteeism: Evidence from Australian research and the Longitudinal Surveys of Australian Youth.

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STAYING LONGER AT SCHOOL AND ABSENTEEISM: EVIDENCE FROM AUSTRALIAN RESEARCH AND THE LONGITUDINAL SURVEYS OF AUSTRALIAN YOUTH

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In 1967, the apparent retention rate in Australian schools was 22.7 per cent. Over the next eight years, this rate grew to 34.1 per cent, then remained close to that point until 1982, when it began to increase again. Over the following ten years, the rate more than doubled, growing from 36.3 per cent in 1982 to 77.1 per cent in 1992. The rate peaked in 1992, and has remained above 72 per cent into the 2000s. In 2002, the Year 7-12 apparent retention rate was 75.1 per cent.[1] While the apparent retention rate is often mistakenly considered a Year 12 completion rate, it does rise and fall as the completion rate rises and falls, and is a reasonable proxy for monitoring trends in the proportion of students who participate in senior secondary school education.

During this period, apparent retention was not the only rate to change dramatically. Between the middle of the 1980s and the late 1990s, the proportion of 15- to 19-year-olds in full-time employment dropped from 32 per cent to 17 per cent, where it remained in 2002. The number of young people in part-time employment increased over the same period, as did the structure of the Australian economy, with fewer positions in unskilled and semi-skilled occupations (Lamb et al., 2000). Together, these trends suggest a strong relationship between the labour market and young people staying longer at school.

Youth in Transition (YIT), a program of longitudinal surveys conducted by the Australian Council for Educational Research (ACER), began in 1978. The program was designed to trace national samples of 6 000 young people who were born in 1961 and had participated as 14-year-olds in the Australian Studies in School Performance in 1975 (Keeves & Bourke, 1976). New samples were added in 1981, 1985 and 1989, based on cohorts of young people born in 1965, 1970 and 1975, respectively. Data were collected on each of the first three cohorts until the mid-1990s; data collection from the 1975 birth cohort ended in December 2002. A new cohort was added in 1995, and the program was renamed the *Longitudinal Surveys of Australian Youth* (LSAY); a second LSAY cohort was added in 1998. Each of these LSAY cohorts comprised more than 13 000 young people who were in Year 9 in those years. LSAY also incorporates data from cohorts of the *Australian Longitudinal Survey* (ALS) and the *Australian Youth Survey* (AYS), two Commonwealth survey programs that concentrated on the labour market and training experiences of young people in the late 1980s and early 1990s. A third LSAY cohort commences in 2003.

Much of the interest in these longitudinal studies has been in understanding the transitions young people make from school: to work, to further study and into society as adults. The young people were first contacted in school (although not for AYS), and have been interviewed annually until about age 27. Members of the last of the YIT cohorts—young people born in 1975—were contacted for the last time at the end of 2002, aged 27. Some of the earlier cohorts had been contacted somewhat sporadically until age 30 or 33. The current

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[1] All information on apparent retention rates are from annual publications of Australian Bureau of Statistics, *Schools, Australia* (cat 4221.0), for the respective years.

Paper presented to the forum of the South Australian Institute for Educational Research and Flinders University Institute for International Education, Adelaide, August 2003.

cohorts were modally 22 and 19 years old in 2002. LSAY provides valuable information on changes in senior secondary education from the early 1980s to the early 2000s.

WHO IS STAYING AT SCHOOL?

Lamb, Dwyer and Wyn (2000) examined school non-completion using data from the ALS and AYS cohorts. McMillan and Marks (2003) also examined non-completion, concentrating on the LSAY 1995 Year 9 cohort. While both pieces of research focused on the outcomes of non-completion and the pathways followed by non-completers, they also provided information on who completed Year 12 during the 1980s and 1990s. This information is summarised for males and females separately in Table 1.

Table 1. Year 12 completion rates by selected student background characteristics, 1980s and 1990s, by gender

	Males				Females			
Background characteristic	Early 1980s	Late 1980s	Mid 1990s	Late 1990s	Early 1980s	Late 1980s	Mid 1990s	Late 1990s
Total cohort	38	54	70	74	49	63	82	84
Parent occupation group								
Professional/managerial	67	73	84	83	77	81	93	89
Clerical/sales/service	57	71	78	77	65	75	86	86
Skilled manual	32	52	70	66	49	62	83	79
Semi-/unskilled manual	29	40	62	60	32	55	79	78
Parent education								
University	75	81	85	87	77	85	95	92
Post-secondary	57	69	78	71	68	77	88	87
Secondary or less	33	48	64	73	44	60	80	82
Location								
Metropolitan	40	57	72	79	51	68	86	88
Non-metropolitan	31	46	57	66	42	52	75	79
Parents' country of birth								
Australia	35	51	67	71	49	60	81	81
Other English-speaking	34	50	73	72	33	59	87	81
Non-English speaking	53	69	81	87	57	76	91	91
School sector								
Government	33	48	65	68	42	57	79	79
Catholic	47	70	82	86	63	78	90	90
Independent	79	83	89	87	82	87	95	90

Source: McMillan & Marks (2003), appendix 4, based on Lamb et al. (2000), table 3.1, and McMillan & Marks (2003), chapter 3. The original table in McMillan & Marks (2003) used rates of non-completion.

Some of the more noteworthy changes in completion rates are the substantial increases by young people whose parents were from semi-skilled and unskilled manual occupations, especially for young females; the increases by young people whose parents had not done any post-secondary education themselves; the doubling of the completion rate for students from government schools and Catholic schools; and the differences of approximately ten percentage points between males and females at each point. The characteristics of young people in senior secondary school in 2003 are much different from the characteristics of those who completed Year 12 twenty years ago.

It should be noted that the completion rates shown in Table 1 are affected by the interrelationships of student background characteristics. For example, while there tends to be a difference of around ten percentage points between metropolitan and non-metropolitan students, these differences are not statistically significant when analysed using multivariate techniques, accounting for other characteristics (see, for example, Lamb, 1996).

WHAT ARE THESE YOUNG PEOPLE STUDYING AT SCHOOL?

With the increased participation of young people at school, there have been changes in what is being studied in the senior secondary years. One notable change is the widening of options within learning areas, such as the expansion of mathematics to include courses such as Mathematics in Society and Mathematics in Practice, designed for students who have experienced limited success in school mathematics. Another notable change is the incorporation of vocational education and training (VET) into the school curriculum. The inclusion of VET subjects in senior secondary has been both a cause and an effect of increased retention. While the increase of VET offerings was a response to the increase in the retention of young people, State education departments also provided these options to encourage more young people to remain at school.

A number of reports have examined subject enrolments in Year 12. Ainley, Jones and Navaratnam (1990), Ainley, Robinson, Harvey-Beavis, Elsworth and Fleming (1994), Fullarton and Ainley (2000) and Fullarton, Walker, Ainley and Hillman (2003) have looked at subject participation among Year 12 students in Australia during 1990, 1993, 1998 and 2001, respectively. From these reports it is possible to examine the changing patterns of senior secondary school enrolments. Table 2 summarises enrolments by key learning areas for students in Year 12 in 1993, 1998 and 2001, the years for which subjects were organised according to key learning areas.[2]

Between 1993 and 2001, there has been a drop in the proportion of young people studying English, even though it is mandatory for a senior secondary school certificate in almost all States. Some of the explanation is the acceptance of English as a Second Language courses as alternatives, reflecting the changing population of young people in Year 12, but some is a reflection of the changes in senior secondary enrolment patterns. In a number of States, part-time study is an option in the senior secondary years, allowing young people to combine school and work, or school and other forms of study; in these cases, the young people surveyed may not have been studying English in the year of the survey.

Some subjects have grown in relative popularity among Year 12 students, while some have decreased. Business Studies, in the Society and Environment learning area, has increased in the proportion of students enrolled, from 9 per cent in 1993 to 23 per cent in 2001, while Geography, Politics and Social Studies, Economics, Legal Studies and Accounting have all declined in enrolments. The proportion of students enrolled in almost all Science subjects have decreased, with only Psychology, a relatively newer school subject gaining enrolments. While there was an increase in the proportion of students undertaking Computer Studies between 1993 and 1998, there was a slight decrease between 1998 and 2001. Also under the Technology learning area, Food/Catering subjects have replaced Home Science in popularity, while enrolments in another service-based subject, Child Studies, have also increased (Fullarton et al., 2003).

[2] Another LSAY report, by Lamb and Ball (1999), used data from the AYS cohorts to examine subject participation in Year 12, but the subjects were not organised according to KLAs.

Table 2 Year 12 participation rates in subject areas, 1993-2001

		Percentage of Year 12 students		
Key Learning Area	Subjects	1993	1998	2001
English				
	English	92.1	92.8	88.0
	ESL	1.2	0.8	6.0
	Literature	5.5	5.3	4.5
Mathematics				
	Mathematics	86.3	87.5	84.3
	Basic Mathematics	-	-	22.5
	Intermediate Mathematics	-	-	25.9
	Advanced Mathematics	-	-	35.8
Society and Environment				
	History	21.1	17.4	18.2
	Geography	18.3	13.8	12.0
	Politics & Social Studies	15.2	15.7	7.0
	Economics	17.8	10.8	7.0
	Legal Studies	15.2	11.1	11.8
	Accounting	12.0	7.3	6.4
	Business Studies	9.2	17.1	22.7
	Secretarial Studies	4.3	1.8	1.4
	Tourism & Hospitality	1.9	1.5	2.2
	Religious Studies	17.6	12.2	15.5
Science				
	Chemistry	22.6	20.3	17.8
	Physics	20.4	20.0	16.6
	Biology	31.7	25.2	25.4
	General/Multi Strand Science	7.2	10.2	7.0
	Psychology	5.1	5.5	6.9
	Other Sciences	4.2	1.9	3.2
Arts				
	Creative and Visual Arts	17.4	18.2	20.9
	Performing Arts	7.3	6.6	10.0
	Music	3.6	4.9	6.2
LOTE				
	French	1.9	1.5	2.0
	German	1.2	1.3	1.0
	Indonesian	na	0.8	0.8
	Italian	1.1	1.0	1.2
	Japanese	2.2	2.1	2.7
	Other languages	1.3	3.4	2.3
Technology				
	Computer Studies	20.7	27.7	27.0
	Technical Studies	16.9	23.2	16.4
	Home Science	11.0	4.7	6.1
	Food/Catering	3.8	6.5	9.8
	Agriculture	2.4	2.8	2.6
	Child Studies	na	1.1	4.2
Health & Phys. Ed.				
	Physical Education	17.6	17.7	15.0
	Health	1.9	8.5	9.9
Not Classified/Other		1.7	7.2	0.1

Source: Fullarton et al. (2003), table 9.

Fullarton et al. (2003) looked at relationships between specific background factors and participation in subjects for Year 12 students in 2001. They found that higher achievers in Year 9 were more likely to enrol in advanced mathematics and physical sciences subjects in Year 12, and less likely to enrol in technical studies, including computing studies. Young people whose parents were born in a country where English is not the main language were more likely to enrol in the physical sciences and less likely to enrol in the biological sciences; more likely to enrol in economics and business and less likely to enrol in the humanities and

social sciences; and less likely to enrol in technical studies—except computing studies—and the arts.

Within individual States, there were changes in the distribution of subject enrolments over the period. A comparison of subject enrolments in New South Wales government schools in 1991 and again in 1997 reflects the changes noted above (New South Wales, 1992, 1997):

- The proportion of Year 12 students enrolled in 2-unit Contemporary English more than doubled, from 16 per cent to 36 per cent, while the proportion in 2-unit and 3-unit English decreased from 24 per cent to 12 per cent;
- Enrolments in 2-unit Mathematics in Society and 2-unit Mathematics in Practice grew from 37 per cent of all Mathematics enrolments to 57 per cent, while 3-unit and 4-unit Mathematics decreased in their share of enrolments from 28 per cent to 17 per cent;
- The proportion not studying a Science subject grew from 8 000 to 14 000, while the total Year 12 enrolment remained fairly constant; and
- The number of students in Business Studies increased from 1 312 in 1991 to 7 791 in 1997.

VET in Schools, Work Experience and Structured Workplace Learning

One of the options to increase school retention and completion has been the introduction of programs of vocational education and training (VET) in schools, including work experience and structured workplace learning programs. Under VET in Schools, school students enrol in vocational programs that comply with the National Training Framework and receive credit toward a senior school certificate. VET in Schools may include programs at TAFE colleges, and they may involve structured workplace learning or New Apprenticeships. Approximately 84 per cent of students in the LSAY 1995 Year 9 cohort participated in work experience in either Year 10 or Year 11, and less than 10 per cent in structured workplace learning. Nearly one-quarter of the cohort had participated in VET in Schools at some time in Year 11 or 12 (Fullarton, 1999, 2001).

Participation in all programs was highest among lower-achieving students; students attending government schools; students of English-speaking background; students with parents in manual, clerical and service occupations; and students attending schools in non-metropolitan areas. In addition, students who participated in VET programs while at school had expressed less positive attitudes toward school when surveyed in Year 9 (Fullarton, 1999, 2001).

What Are the Consequences of Curriculum Choices?

Lamb and Ball (1999) used AYS data to relate curriculum patterns in Year 12 to post-school participation in education, training and employment. They found that students who had undertaken a program of study dominated by mathematics and science subjects were most likely to participate in higher education at age 19. Those who had followed a course of study that included many vocational education and technology subjects were least likely to be in further education or training at the same age; they were, however, most commonly in full-time work.

The relationship changes between curriculum choices and employment when young people who were not engaged in further education and training are removed from the analysis. Young people who had undertaken vocational education and training subjects had experienced four or more spells of unemployment by age 19 more frequently than young people who had undertaken any other group of subject in school. Those who had

concentrated on sciences and mathematics had experienced the fewest spells of unemployment (Lamb & Ball, 1999).

SCHOOL STUDENTS AND PART-TIME WORK

Another result of the increased participation in post-compulsory schooling is the increase in the proportion of students who are working part-time. Robinson (1996, 1999) examined part-time employment among the YIT cohort of young people born in 1975. She reported that approximately 30 per cent of Australian 17-year-old secondary school students held regular part-time jobs during the school year, and they worked between eight and nine hours per week. Young women were most commonly found in sales and personal service occupations, while young men worked as labourers, as kitchen hands and in 'other sales' positions (Robinson, 1999). When asked why they worked, more than three-quarters of these young people stated that they 'liked the sense of independence the job provided' and they 'needed the money' for financial support. Approximately 14 per cent said that the money allowed them to remain in school.

Robinson (1999) also looked at the effects of part-time work on school outcomes. After a number of student background factors—gender, ethnic background, parent occupation and education, family wealth, and achievement in Year 9—were considered, engagement in part-time work did not have a significant effect on Year 11 students' completion of Year 12. When the intensity of part-time work was considered, the effect changed, but only for those who worked more than ten hours per week. Robinson (1999) also examined the effects of part-time work on Year 12 students' tertiary entrance rank. She found no significant differences among students who worked up to ten hours per week in either Year 11 or Year 12, but a significant effect for students who worked more than ten hours per week during Year 11, although not during Year 12. She acknowledged the problem of determining cause and effect in these findings: Are students who work more than ten hours per week negatively affected by their employment, or are they less attached to school and committed to completing Year 12?

Students' part-time work was also investigated by Vickers, Lamb and Hinkley (2003), using the LSAY Year 9 1995 cohort. They found that 24 per cent of the cohort were working part-time in Year 9. Student workers were more commonly male, attending government schools, from an English-speaking background, and living in non-metropolitan areas. There was no difference in participation by achievement level, and those from the lowest parent occupation group were less likely to be working part-time. They also found that working more than five hours per week had an additional effect, beyond socioeconomic status and other background factors, on leaving school before completing Year 12. They did not, however, include any of the LSAY information on students' attitudes toward school or their aspirations.

During Term 3, 2000, the Department of Education, Training and Employment, with the assistance of the Australian Bureau of Statistics, surveyed 1 417 students from Years 10, 11 and 12 in 119 South Australian government secondary schools. The Department reported that 47 per cent of these students were working, with a further 19 per cent unemployed or looking for work, and 33 per cent not in the labour force. Of those working, close to 40 per cent worked for ten or more hours, with those in Year 12 more likely to be working more hours (South Australia, 2000).

ARE THERE BENEFITS FOR YOUNG PEOPLE STAYING LONGER AT SCHOOL?

The push for increased retention of young people at school has been seen as important for young people, because they would benefit from more secondary school education. The major

argument is that with more schooling, young people enter the labour force or further study better prepared for the modern world. For example, Ryan (2003), using data from the YIT 1975 cohort and the LSAY 1995 cohort, found initial employment benefits for South Australian young people who had spent an additional six-to-twelve months at school after the introduction of the *Early Years of School* policy.

The effects of the non-completion of Year 12 has been one topic of interest that can be better addressed using longitudinal research. McMillan and Marks (2003) compared the post-school experiences of school non-completers with those of school completers who did not enter higher education. Non-completers were also classified as early leavers if they left school before the commencement of Year 11, and as later leavers if they left after the commencement of Year 11 and before the completion of Year 12. All data were obtained from the LSAY 1995 Year 9 cohort. They found that one-half of the early leavers had completed a qualification by the end of 2000, as had one-third of the later leavers. They also found that in 2000, there was no significant difference between completers and non-completers in the likelihood of being unemployed, and that later leavers were more likely than early leavers to be unemployed after other background factors were considered. 'This suggests that for non-completers, length of time in the labour market is positively related to employment status; that is, the longer a non-completer has been out of school, the more time they have had to find employment.' (p. 62). They also noted that 'the length of time spent in the labour market ... had the same net effect as Year 12 completion on securing employment' (p. 62), and that male non-completers who had undertaken an apprenticeship had made a more successful transition to the labour market.

Even though there were some positive outcomes for non-completers among the 1995 Year 9 cohort, there were indications that completion of Year 12 was beneficial. Male non-completers were more likely to be unemployed than male completers, and female non-completers were more likely to be out of the labour force altogether. McMillan and Marks (2003) recommended continued monitoring of this cohort to determine if the 'not unequivocal' findings—that early school leavers were faring about as well as completers who did not attend higher education—change as both groups have more exposure to the labour market (p. 88).

WHO ATTENDS SCHOOL EACH DAY?

LSAY does not include information on student attendance as part of its annual data collection. Information is available, however, from State education agencies—at least for students attending government schools—although statistics regarding student attendance are rarely made public. In 1997, the South Australian Department for Education and Children's Services added an attendance module to its schools' data management system, EDSAS. This module allowed the collection of data on student absences for any specified period of time; to reduce the workload on schools, data for only the second term of the school year were gathered in the first years of the collection. After overcoming some of the glitches associated with new computer software, the Department was able to report some statistics.

Using these data for 1997 and 1999, Rothman (2002) reported that absence rates were lowest among students in the middle primary grades, particularly in Years 3 through 5, at slightly greater than 5 per cent. Among secondary students, Year 10 students had the highest absence rates, between 10 and 11 per cent. Senior secondary students had absence rates between 9 and 11 per cent. The proportion of absences that were unexplained increased as students reached secondary school, from around 30 per cent in the primary years to more than one-half in Years 11 and 12. Unfortunately, the data do not allow further understanding of

'unexplained' absences;[3] it is not possible to determine how many were absent because of job commitments, school timetabling, illness or 'misadventure'.

It has been argued that attendance can serve as an indicator of a student's attitude toward school and self-concept (Altenbaugh et al., 1995; House of Representatives, 1996; Reid, 1982). While attendance is not examined as part of the LSAY program, items relating to attitudes toward school are included in the LSAY questionnaires. Marks (1998) examined students' attitudes and found that only attitudes toward achievement, as measured using portions of the *Quality of School Life* scales (Williams & Batten, 1981), had a significant effect on leaving school before Year 10. Other LSAY research has noted the influence of students' attitudes, aspirations and self-concept of ability on achievement in Year 9 (Rothman & McMillan, 2003), on their participation in extra-curricular activities (Fullarton, 2002), and on tertiary entrance performance (Marks, McMillan & Hillman, 2001).

DISCUSSION

Over the past twenty years, changes to the social, economic and educational lives of young people have created new issues for Australian senior secondary schools. Participation in the senior secondary years of school has more than doubled, with much of this change coming from groups of young people who had less exposure to senior secondary education than many of their counterparts. Most significantly, participation increased among young people whose parents work in lower-status occupations and among those with lower achievement in the earlier years of schooling. The labour market for young persons has also changed since the 1980s. In July 2002, 779 500 young persons aged 15-19 were in the labour force, representing 57 per cent of the age group. More than one-third of secondary school students aged 15-19 were employed, with 3 per cent of student workers employed full-time (Australian Bureau of Statistics, 2002). These increases have meant changes in the pathways taken by young people entering the work force, as well as changes in schools to accommodate the needs of students in the post-compulsory years. Many of these changes have also been recorded by the Longitudinal Surveys of Australian Youth.

Even though participation in senior secondary education has increased over this period, close to one quarter of young people still leave school before completing Year 12. Although more than one-half of these school leavers say they are unhappy with school, their main reasons for leaving school are employment-related: they leave school to get a job, undertake an apprenticeship or traineeship, earn their own money, or experience freedom. Very few students state that a dislike for school is the main reason for leaving (McMillan & Marks, 2003). Despite the many changes that have occurred in senior secondary schools, young people are maturing and often finding that schools are not necessarily the most appropriate places for them. Some young people do leave school before completing Year 12 and experience a successful transition to the labour force. More frequently than not, these successful transitions include some form of post-secondary education or training.

As young people enter the labour force while at school, schools need to adapt to students' working hours. In the current economic and social climate, it is difficult for young people to devote all of their time to school study. Some school systems have already developed interesting arrangements for young people so that they can remain at school while entering the labour force, including part-time senior secondary study, separate and/or alternative campuses and extended hours (including evening classes), in addition to awarding credit for skills

[3] An unexplained absence is simply an absence for which no explanation was recorded up to the time of the collection.

gained while working. Government schools have been the most accommodating in meeting these needs, although there are some notable exceptions in the non-government sector, especially in the provision of 'Year 13' in some States.

It has been the stated policy of State and Commonwealth governments to promote the completion of Year 12 or its VET equivalent for all young people. The question remains, however, whether this is the best option for all young people, and how it is best achieved. The VET equivalent of Year 12 requires enrolment through a registered training provider; a good deal of learning occurs 'on-the-job' and is never formally recognised with certificates of participation or achievement. For some young people, the availability of VET may not provide enough incentive to remain in a secondary school.

It is necessary that we reassess our policies and practices to best meet the needs of young people in the post-compulsory years. Is the completion of Year 12 best for all young people? Who decides what pathway is best for each young person? Should all post-compulsory education and training be done in formal, semi-formal and informal settings? Must such learning be accredited by State and Commonwealth agencies, or can we accept informal on-the-job training as a benefit? Is there any benefit for the young person who leaves school at age 16 and travels, or are such notions outdated and inappropriate for the current economic and social climate? Should we revisit the debates regarding opportunity and outcomes?

We need to decide as a nation whether education and training are best completed when a young person is between the ages of 15 and 25. Lifelong learning, as its name suggests, is the recognition that learning should not stop when a person leaves school. It crosses all boundaries, so that nuclear physicists undertake classes in jazz ballet, and men and women caring for children learn to converse in Spanish. They do not take these courses to gain employment, but to learn. As it is now being promoted by some, however, lifelong learning must have a vocational goal, so that courses in sailing and black-and-white photography do not necessarily qualify. If we choose to see *all* learning as beneficial, then we may alter our perceptions of what occurs in the senior secondary years of schooling, and we may better adjust the curriculum to suit the needs of the young people who inhabit our schools.

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